What is needed is a method of more accurately determining warranty cost when a warranty upgrade is requested. A method of reminding users of the need for a warranty upgrade is also desired. Moreover it is desirable that such methodology minimize the likelihood of fraud.

Summary

Accordingly, in one embodiment a method is provided for upgrading the warranty of a computer system including a plurality of components in a configuration. The computer system detects changes made to its configuration. The computer system sends a warranty upgrade request to a remote warranty processor when such a change in the configuration of the computer system is detected. The warranty upgrade request includes configuration information for the computer system that was upgraded or changed.

In another embodiment, a method is provided for upgrading the warranty of a computer system including a plurality of components in a configuration. A warranty processor receives a warranty upgrade request from the computer system. The warranty request is generated by the computer system when the computer system detects a change it its configuration. The warranty request includes configuration information for the computer system and is transmitted to the warranty processor. The warranty processor determines a warranty upgrade price dependent on the configuration information in the warranty upgrade request.

A principal advantage of this embodiment is that upgrade warranty cost is accurately determined on a computer system by computer system basis according to the particular configuration of the system for which a warranty upgrade is requested. Moreover, the user is reminded to upgrade the warranty when the computer system detects a change in its configuration.

Brief Description of the Drawings

FIG. 1 shows a representative configurable electrical device on which the disclosed methodology is practiced.

FIG. 2 is a block diagram showing a simplified view of the electrical device of FIG. 1.

FIG. 3 is a flowchart providing more detail regarding one embodiment of the disclosed warranty upgrade process wherein the upgrade warranty request is "user initiated".

Fig. 4 is a block diagram of the warranty server employed by the disclosed methodology.

FIG. 5A is a flowchart providing more detail regarding another embodiment of the disclosed warranty upgrade process wherein the upgrade warranty request is "automatically initiated" upon configuration change.

FIG. 5B is a flowchart providing more detail regarding yet another embodiment of the disclosed warranty upgrade process wherein the upgrade request is "automatically initiated" upon first computer use or a predetermined amount of time thereafter.

FIG. 6A is a block diagram of a multi-processor server computer upon which the disclosed warranty upgrade methodology is practiced.

FIG. 6B is a block diagram of the processor memory module employed by the server computer of FIG. 6A.

FIG. 6C is a block diagram of the I/O module employed by the server computer of FIG. 6A.

FIG. 7A is a block diagram of a blade server computer upon which the disclosed warranty upgrade methodology is practiced.

FIG. 7B is a block diagram of one of the blade computers employed in the computer of FIG. 7A.

Detailed Description

FIG. 1 shows a representative configurable electrical device 100 on which the disclosed methodology is practiced. In this particular embodiment, device 100 is a computer system including numerous components, modules and FRU's which can be changed or upgraded by the user or others.

Computer system 100 includes a processor 105 which operates at one of many different selected clock speeds, for example, 1.7 GHz, 1.8 GHz and 2.0 GHz. Processors with higher clock rates tend to produce more heat. Temperature and clock rates can affect the longevity of the processor and this characteristic can be used as a factor in determining the respective warranty upgrade prices as discussed later.

An Intel Hub Architecture (IHA) chip 110 provides system 100 with memory and I/O functions. More particularly, IHA chip 110 includes a Graphics and AGP Memory Controller Hub (GMCH) 115. GMCH 115 acts as a host controller that communicates with processor 100 and further acts as a controller for main memory 120. Main memory 120 is upgradeable by the user and its size is another factor to use in determining upgrade warranty price. GMCH 115 also provides an interface to Advanced Graphics Port (AGP) controller 125 which is coupled thereto. A display 130 is coupled to AGP controller 125. Both controller 125 and display 130 are upgradeable components and these upgrades are usable as warranty price factors. For example, controller 125 is replaceable by a video graphics controller with higher memory and resolution than the original controller. Likewise, display 130 can be replaced with a monitor exhibiting higher resolution and/or increased screen size.